

## INVASIVE SPECIES MANAGEMENT WITH VOLUNTEERS PROJECT PROPOSALS

Name of Project: Turnbull NWR Early Detection and Rapid Response Team

Refuge/Wetland Management District: Turnbull National Wildlife Refuge

Project Urgency/Impact: Volunteers have since 2004 undertaken a refuge-wide, GPS-based invasive plant survey and assisted with our Early Detection and Rapid Response Program (EDRRP). Approximately 80% of the refuge has been surveyed resulting in the location of several previously unknown populations of spotted and Russian Knapweed, yellow starthistle and medusa head wild-rye which received rapid response control actions (manual removal, chemical application, and biocontrol). Both yellow starthistle and medusa head wild-rye are emerging threats found for the first time on the refuge in the past 2 years. The refuge has recently purchased several tracts that need to be surveyed and mapped. Funding from this grant will allow for the purchase of biocontrol agents, chemicals and application equipment to facilitate the rapid response phase of the project and provide funds to hire either an AmeriCorps member or independent contractor through the Refuge's Friend's Group. The AmeriCorps member/contractor will assist with coordinating the Refuge EDRRP through the summer of 2014. The AmeriCorps member/contractor, Refuge Wildlife Biologist, Volunteer Coordinator and Friends of Turnbull NWR will recruit and train volunteers in the use of GPS equipment, survey software and EDRRP protocols. In addition to the refuge work, a new Cooperative Weed Management Area has been organized for the region surrounding the refuge. The Cooperative Weed Management Area is developing a mobile weed mapping application, hosting a number of workshops on weed identification and control, recruiting volunteers and conducting weed mapping training. The AmeriCorps member/Contractor's and other volunteers will also provide support for this cooperative effort.

**Comment [BFW1]:** Yes, but... hiring through the Friends Group doesn't qualify. The objective is to utilize volunteers to do the work.

Friends Groups, Volunteers and Other Partners: **The Friends of Turnbull NWR** will provide the AmeriCorps member and assist with outreach and volunteer recruitment through their newsletter and membership. **Eastern Washington University Biology Department, Spokane Community College Environmental Sciences Program, Upper Columbia Academy**, and other community groups and individuals that currently assist the refuge will be the source of volunteers for the EDRRP teams. **Washington Service Corps** is our partner for the AmeriCorps program. Technical assistance will be provided by the partners in the Cooperative Weed Management Area (**Upper Columbia Resource Conservation and Development Council, Spokane County Extension, Lincoln County weed Board, Spokane County Weed Board, and Washington State University Extension**). Total partner contribution to project: \$20,000.00 (in kind services)

Survey/Inventory and Post-treatment Monitoring: The remaining 20% of the refuge and new acquisitions will be systematically surveyed and mapped using a GPS-based weed mapping protocol. Areas treated over the past 2 years will be revisited to evaluate their effectiveness and retreat using IPM procedures if necessary.

Integrated Pest Management & Early Detection/Rapid Response (ED/RR): All practical and available IPM strategies (biological, mechanical/physical, and chemical means) will be used to control/eradicate invasive populations of 10 Class A and B weed species when located on the refuge. All infestations receiving control will be mapped and the treatment documented by volunteers and staff using the refuges GPS/GIS weed mapping program. Sites treated the previous year will be revisited to determine their efficacy.

Criteria for Project Success: : At least 3 volunteers will be recruited and trained to conduct Early Detection Surveys. At least 2,000 acres, will be systematically surveyed. All new locations of yellow star thistle, knapweeds, common bugloss, leafy spurge and medusa-head wildrye will be treated with appropriate IPM strategies. All areas treated the previous 2 years will be revisited to evaluate their effectiveness and retreat if possible. .

Budget: Please provide line item descriptions of the expenses that make up your budget.

AmeriCorps member/Independent Contractor (FOTNWR)	\$6,000
BioControl Agents (insects) and Herbicides	\$5,000
Two Backpack sprayers for EDRP work	\$1,000
Total:	\$12,000